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L1 ANSWER 1 OF 1 MEDLINE  
AN 92103930 MEDLINE  
DN 92103930 PubMed ID: 1760927  
TI **Clinical use of tumor markers in oncology.**  
AU Jacobs E L; Haskell C M  
CS Department of Medicine, UCLA School of Medicine.  
SO CURRENT PROBLEMS IN CANCER, (1991 Nov-Dec) 15 (6) 299-360. Ref: 218  
Journal code: 7702986. ISSN: 0147-0272.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
(REVIEW, ACADEMIC)  
LA English  
FS Priority Journals  
EM 199202  
ED Entered STN: 19920302  
Last Updated on STN: 19920302  
Entered Medline: 19920213  
AB The perfect tumor marker would be one that was produced solely by a tumor and secreted in measurable amounts into body fluids, it should be present only in the presence of cancer, it should identify cancer before it has spread beyond a localized site (i.e., be useful in screening), its quantitative amount in bodily fluids should reflect the bulk of tumor, and the level of the marker should reflect responses to treatment and progressive disease. Unfortunately, no such marker currently exists, although a number of useful but imperfect markers are available. The predominant contemporary markers are discussed here by chemical class, as follows: glycoprotein markers, including carcinoembryonic antigen (CEA), alpha-fetoprotein (AFP), beta-human chorionic gonadotropin (beta-hCG), and prostate specific antigen (PSA); mucinous glycoproteins, including CA 15-3, CA 19-9, mucinous-like cancer antigen and associated antigens, and CA 125; enzymes, including prostatic acid phosphatase (PAP), neuron specific enolase (NSE), lactic acid dehydrogenase (LDH), and placental alkaline phosphatase (PLAP); hormones and related endocrine molecules, including calcitonin, thyroglobulin, and catecholamines; and, molecules of the immune system, including immunoglobulins and beta-2-microglobulin. The biologic properties of each group of tumor markers are discussed, along with our assessment of their role in clinical medicine today.

L9 ANSWER 1 OF 2 MEDLINE  
AN 1999071664 MEDLINE  
DN 99071664 PubMed ID: 9854500  
TI Comparison of nuclear matrix protein 22 and bladder tumor antigen in urine of patients with bladder cancer.  
AU Abbate I; D'Introno A; Cardo G; Marano A; Addabbo L; Musci M D; Pagliarulo A; Correale M; Quaranta M  
CS Oncology Institute of Bari, Italy.  
SO ANTICANCER RESEARCH, (1998 Sep-Oct) 18 (5B) 3803-5.  
Journal code: 8102988. ISSN: 0250-7005.  
CY Greece  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199901  
ED Entered STN: 19990115  
Last Updated on STN: 19990115  
Entered Medline: 19990107  
AB Recently, two new **tumor markers** for **bladder cancer** have been introduced: NMP22 test and BTA TRAK assay. This study was designed to evaluate the urinary values of these two proteins using quantitative enzyme immunoassays in well microplates. Urine samples from 47 healthy subjects, 26 with benign genitourinary disorders and 109 patients with a histological diagnosis of bladder cancer were collected. The specificity, the positive predictive value, the negative predictive value and the efficiency were established for NMP 22 and BTA, and the cut off values were fixed at a specificity of 95% in the benign disease group (12 U/ml and 23 U/ml respectively). We observed a very high concordance between the two urinary tumor markers (73%), although the overall sensitivity of BTA in bladder cancer patients seems to be better than that of NMP22 (62% vs 54% respectively), especially in the superficial disease group (36% for BTA and 14% for NMP22).

L9 ANSWER 2 OF 2 MEDLINE  
AN 97099420 MEDLINE  
DN 97099420 PubMed ID: 8943997  
TI **New tumor markers in bladder cancer:** high promise for lower risk patients?  
AU McNeil C  
SO JOURNAL OF THE NATIONAL CANCER INSTITUTE, (1996 Dec 4) 88 (23) 1704-5.  
Journal code: 7503089. ISSN: 0027-8874.  
CY United States  
DT News Announcement  
LA English  
FS Priority Journals  
EM 199612  
ED Entered STN: 19970128  
Last Updated on STN: 19970128  
Entered Medline: 19961223

L8 ANSWER 1 OF 2 MEDLINE  
AN 97049140 MEDLINE  
DN 97049140 PubMed ID: 8893870  
TI Therapy of superficial **bladder cancer**.  
AU Nseyo U O; Lamm D L  
CS Department of Urology, West Virginia University School of Medicine,  
Morgantown 26505-9251, USA.  
SO SEMINARS IN ONCOLOGY, (1996 Oct) 23 (5) 598-604. Ref: 49  
Journal code: 0420432. ISSN: 0093-7754.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
(REVIEW, TUTORIAL)  
LA English  
FS Priority Journals  
EM 199611  
ED Entered STN: 19961219  
Last Updated on STN: 19961219  
Entered Medline: 19961127  
AB Intravesical therapy has been used in the management of superficial transitional cell carcinoma (TCC) of the urinary bladder (Ie, Ta, T1, and carcinoma in situ [CIS]) with specific objectives that include treating existing/residual tumor, preventing recurrence of tumor, preventing disease progression, and prolonging survival. The initial clinical stage and grade remain the main determinant factors in survival irrespective of the treatment. Intravesical chemotherapy has shown a decrease in short-term tumor recurrence rates, but has had no positive impact on disease progression or prolongation of survival. Presently, bacillus Calmette-Guerin vaccine (BCG) immunotherapy remains the most effective treatment and prophylaxis for TCC (Ta, T1, CIS) and has positive outcome on tumor recurrence rate, disease progression, and prolongation of survival. Prostatic urethral mucosal involvement with bladder cancer can also be effectively treated with BCG intravesical immunotherapy. Interferons, keyhole limpet hemocyanin and photofrin-photodynamic therapy are under investigation in the management of TCC and early results are encouraging. This review highlights and summarizes the recent advances in intravesical therapy and prophylaxis of superficial TCC.

L8 ANSWER 2 OF 2 MEDLINE  
AN 96213561 MEDLINE  
DN 96213561 PubMed ID: 8624800  
TI **Bladder cancer**, 1996.  
AU Lamm D L; Torti F M  
CS Department of Urology, Robert C. Byrd Health Sciences Center of West  
Virginia University, Morgantown, USA.  
SO CA: A CANCER JOURNAL FOR CLINICIANS, (1996 Mar-Apr) 46 (2)  
93-112. Ref: 101  
Journal code: 0370647. ISSN: 0007-9235.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
(REVIEW, TUTORIAL)  
LA English  
FS Abridged Index Medicus Journals; Priority Journals  
EM 199606  
ED Entered STN: 19960708  
Last Updated on STN: 19960708  
Entered Medline: 19960626  
AB In superficial Ta or T1 tumors intravesical chemotherapy can eradicate existing carcinoma in one third to one half of patients and reduce tumor recurrence by 12 to 15 percent, on average. Superficial bladder cancer is remarkably sensitive to immunotherapy, particularly BCG. The use of BCG

eradicates about two thirds of papillary carcinoma and nearly 90 percent of carcinoma in situ and reduces tumor recurrence by an average of 40 percent. Data now suggest that BCG immunotherapy reduces long-term tumor recurrence, disease progression, and mortality. The proclivity for tumor recurrence makes superficial bladder cancer an ideal malignancy for the evaluation of chemoprevention, and preliminary data suggest that high doses of vitamins may also reduce tumor recurrence. In locally advanced T2b to T4, N0 or N1, M0 bladder cancer, substantial clinical responses can be achieved if chemotherapy is used prior to surgical resection of muscle-invasive tumor (neoadjuvant treatment). Controlled trials are necessary to ascertain whether neoadjuvant chemotherapy improves survival. The use of CMV prior to and concomitant with bladder irradiation is also encouraging, but will require randomized trials to clarify its role in the treatment of invasive, nonmetastatic cancer. Finally, trials suggest benefit for chemotherapy used adjuvantly (after cystectomy) for muscle-invasive bladder cancer. However, further investigation is necessary to clarify and confirm the role of chemotherapy in this setting before it can be recommended routinely for patients. In metastatic disease, chemotherapy with CMV or M-VAC with surgical resection of residual masses can produce a cohort of long-term survivors with advanced bladder cancer. How to increase this small but important population of patients is a question for further research.